

Notice of Allowability	Application No.	Applicant(s)	
	09/821,452	MAENAKA ET AL.	
	Examiner	Art Unit	
	Wes Tucker	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 11-23-05.
2. ☒ The allowed claim(s) is/are 1,4-9,12-18,20-25 and 27-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>12-8-05</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>11-23-05</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's amendment filed November 23rd has been entered.
2. Applicant has amended claims 1, 4, 9, 12, 18, 20, 25 and 27. Claims 2-3, 10-11, 18, 26 and 33 have been canceled. Claims 1, 4-8, 9, 12-18, 20-25 and 27-32 are now pending.
3. Applicants arguments have been fully considered and are found to be persuasive.

Allowable Subject Matter

Claims 1, 4-9, 12-18, 20-25 and 27-32 are allowed.

The following is an examiner's statement of reasons for allowance:

Applicant has added the new limitations into the independent claims 1, 9, 18 and 25, detailing how the edge component E is calculated using four pixels d1-d4 and specifying exactly the pixels' spatial relation to one another. The edge component is specified by the equation $E = -d3 + d1 + d2 - d4$ wherein pixels d1-d4 are arranged in a column.

The reference of U.S. Patent 5,888,745 to Muraji et al. discloses a method for interpolating pixels taking into account calculated edge information in a similar manner to the present application. Muraji even teaches determining edge information by using the differences between pixels arranged in a neighborhood (column 29, lines 5-25).

However, neither Muraji nor any of the other found art teaches or reasonably suggests determining and edge value E in the specified manner now presented in the independent claims. Claims 18 and 25 disclose a similar edge value determination with even more steps and therefore the same discussion applies to these claims as well. All of the subsequent dependent claims are therefore also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Relevant Art and Double Patenting

U.S. Patent Application number 10/397,525 commonly assigned to the present invention was found and examined with regard to a potential double patenting issue. However Patent Application 10/397,525 was filed more than a year after the present application. Since this would be a provisional nonstatutory obviousness-type double patenting rejection, as stated in the MPEP in section 804 on double-patenting:

"If a provisional nonstatutory obvious-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue without a terminal disclaimer."

Applicant was made aware of this issue in a telephone interview on December 8, 2005. Refer to the attached interview summary. Examiner asked the applicant to file a terminal disclaimer and Applicant responded by saying that a terminal disclaimer would only be necessary in the later filed application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wes Tucker whose telephone number is 571-272-7427. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wes Tucker

12-12-05



VIKKRAM BALI
PRIMARY EXAMINER